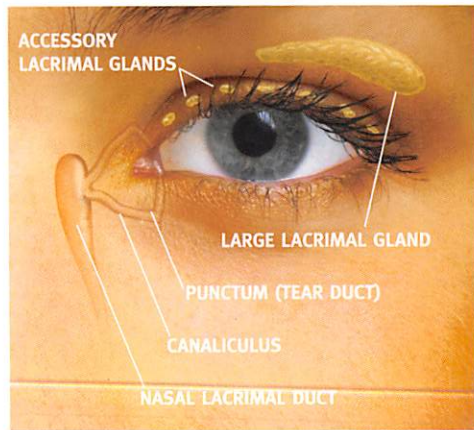


## ABOUT TEARS



The human eye is lubricated by two kinds of tears produced by glands in the upper and lower eyelid.

**CONSTANT TEARS** are continuously formed to lubricate the eye and contain natural antibiotics to help fight infections. When constant tear flow is reduced, there is irritation that can cause excessive reflex tearing ("watery eyes"). These excess tears lack the oil needed to keep from evaporating and do not lubricate the eye.

**REFLEX TEARS** are produced only in response to irritation, injury, or emotion. They help rinse the surface of the eye.

A balance is necessary between the two types of tears to ensure that your eyes are comfortable and protected.

A lack of tears, improper lubrication, or tears draining too quickly from the eye result in a condition known as Dry Eye. Dry Eye is a common problem that is easily diagnosed.

## TREATMENT

Tears can be replaced by using eye drops called **ARTIFICIAL TEARS**. They replace the moisture that is missing and lubricate the eyes. They temporarily soothe Dry Eye symptoms.

Most artificial tears contain preservatives which have recently been discovered to be the culprit in damaging the top layer of the cornea leading to disruption of the tear film when drops are used often. This sequence leaves the surface of the eye unable to keep the tear film in place and can lead to ocular surface disease. Using more than 4 to 6 drops per day increases the likelihood of preservative-induced adverse effects.

It is important to use a preservative-free drop such as Oasis TEARS™. Studies have shown preservative-free preparations are safe to use in patients, especially those who require frequent dosing, or use contact lens solutions or ocular medications.



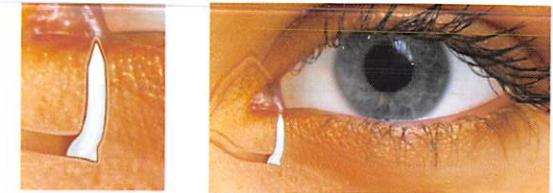
Artificial Tears

Artificial tears and medications have provided a quick, short-term solution to Dry Eye. However, another option is tear duct closure which allows you to retain your own natural tears.

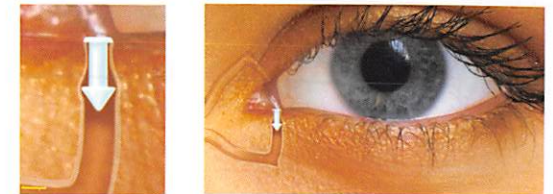
## TEAR DUCT CLOSURE

Temporary closure of the tear duct (punctal canal) is accomplished by inserting a tiny **PUNCTUM PLUG** (like a sink stopper) to prevent tear drainage. This allows your own tears to bathe your eye for a longer period of time. In about one week this plug will dissolve and wash away with your tears. You and your doctor can then evaluate the benefits of tear duct closure for you.

Long-term closure of the tear drainage ducts involves the use of a non-dissolvable, yet removable, plug to seal the tear duct. This non-surgical procedure is painless and takes only a few minutes in your doctor's office.



Enlargement of Intracanalicular Plug



Enlargement of Punctum Plug

**RELIEF** from the discomfort of dry eyes may be immediate for some patients, while for others relief may be more gradual. Artificial tears may be used in conjunction with punctal plugs for severe cases of Dry Eye.

## COMMON CAUSES OF DRY EYE

A lack of tears, improper lubrication, or tears draining too quickly from the eye result in a common condition known as Dry Eye.

### AGING

As we age, tear production decreases. Men and women of any age can be affected, however, after menopause and during pregnancy women are especially susceptible.

### CONTACT LENSES

Wearing contact lenses often increases tear evaporation that can result in irritation, increased protein deposits, infection, and pain. Dry eye has been shown to be the leading cause of contact lens discomfort.

### ENVIRONMENT

Exposure to various environments can reduce eye lubrication. These include sunny, dry or windy conditions; heaters, dehumidifiers, fans or air conditioning; sand, dust or pollen, smoke, high altitudes; work environment and prolonged computer use.

### MEDICATIONS

A variety of medications reduce tear secretion. Some common examples are decongestants, antihistamines, sleeping pills, beta-blockers, anti-depressants, diuretics, pain relievers and alcohol.

### AUTO IMMUNE DISEASE

Auto Immune Disease accompanied by a dry mouth and dry eyes is called Sjogren's Syndrome.

### SURGERY

Surgical procedures can disrupt the production of tears or the balance between Constant and Reflex tears. Post-surgical dry eye is almost always temporary.

## SYMPTOM CHECKLIST

If you experience any of the symptoms below, you may have Dry Eye:

- Dry Sensation
- Scratchy, Gritty Feeling
- Burning
- Stinging
- Itching
- Excess Tearing (Watery Eyes)
- Mucous Discharge
- Irritation from Wind or Smoke
- Redness
- Tired Eyes
- Light Sensitivity
- Contact Lens Discomfort
- Contact Lens Solution Sensitivity
- Soreness
- Lid Infections/Sties
- Sensitivity to Artificial Tears
- Eyelids Stuck Together at Awakening

ARE YOUR

# EYES

DRY,  
BURNING,  
IRRITATED,  
WATERY?

YOU MAY HAVE

# DRY EYE